WO 2005/008642 PCT/IB2004/051258

7

**CLAIMS:** 

1. A method for setting an optimal value of a write power level of a radiation beam (35) for use in an optical recording apparatus for writing information on an optical recording medium (1), the information being written on the optical recording medium by applying the radiation beam to the optical recording medium, the method comprising a first step (S1) of writing a series of test patterns in a test area on the optical recording medium, each test pattern written with a different value of the write power level of the radiation beam, a second step (S2) of reading the written test patterns to form corresponding read signal portions, and a third step (S3) of selecting the optimal value of the write power level in dependence on the read signal portions, characterized in that in the first step the series of test patterns are written at a low recording speed, and that in the third step the optimal value of the write power level at a high recording speed is selected in dependence on the read signal portions and on a parameter indicative of the relation between the value of the write power level at the high recording speed and the value of the write power level at the low recording speed.

15

10

5

- 2. Method according to claim 1, wherein the parameter indicative of the relation between the value of the write power level at the high recording speed and the value of the write power level at the low recording speed (Phigh/Plow) is read from the recording medium.
- 20 3. An optical recording apparatus for recording information on an optical recording medium (1) comprising a radiation source (34) for emitting a radiation beam (35) for recording information on the recording medium, the radiation beam having a controllable value of a write power level, a control unit (12) operative for recording a series of test patterns in a test area in the recording medium, each pattern with a different value of the write power level, a read unit (100) for reading the recorded test patterns and for forming corresponding read signal portions (S<sub>R</sub>), and setting means (11) for setting an optimal value of the write power level in dependence on the read signal portions, characterized in that the control unit (12) is operative for recording the series of test patterns in the test area in the recording medium at a low recording speed,

WO 2005/008642 PCT/IB2004/051258

8

and in that the setting means (11) are operative for setting an optimal value of the write power level at a high recording speed in dependence on the read signal portions and on a parameter indicative of the relation between the value of the write power level at the high recording speed and the value of the write power level at the low recording speed.

5

4. Apparatus according to claim 3, wherein the read unit is operative for reading the parameter indicative of the relation between the value of the write power level at the high recording speed and the value of the write power level at the low recording speed ( $P_{high}/P_{low}$ ) from the recording medium.

10

5. Optical recording medium comprising an area comprising recording parameters indicative of the recording process, said area comprising a parameter indicative of the relation between the value of the write power level at the high recording speed and the value of the write power level at the low recording speed.

15

6. Optical recording medium according to claim 5, wherein the parameter is related to  $P_{high}/P_{low}$ , where  $P_{high}$  is the optimum write power level at a high recording speed and  $P_{low}$  is the optimum write power level at the OPC velocity.